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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,381	07/29/2003	Christopher M. Doran	2335	6533
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SPRINT 6391 SPRINT PARKWAY KSOPHT0101-Z2100 OVERLAND PARK, KS 66251-2100			EXAMINER NGO, NGUYEN HOANG	
			ART UNIT 2616	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/629,381	Applicant(s) DORAN, CHRISTOPHER M.	
	Examiner NGUYEN NGO	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/4/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

This communication is in response to the amendment of 6/4/2008. Accordingly, Claims 1-3, 5-14 are currently pending in the application.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claim 1-3, 5, 6, 7, 12, 14, is rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards (US 2004/0228292), in view of Sun et al. (US 6501740), in view of Mahale et al. (US 6141350), hereinafter referred to as Edwards, Sun, and Mahale.

Regarding claim 1, 12, Edwards discloses a method comprising:

during initiation of a real-time media session between a plurality of user stations (310 and 320 of figure 3) via a communication server (system control 308 provides needed coordination between cell sites and assigns the necessary system resources to support the full duplex dispatch call, page 2 [0018] and figure 3), the communication server directing at least one of the user stations to operate in a mode selected from the group consisting of half-duplex mode and full-duplex mode (switch to full duplex mode or continue to use a half duplex mode of operation, page 1 [0014] and figure 1).

Edwards further discloses that the system control (server) provides the needed coordination between the cell sites, the landline network, and the MSs and operating within the wireless communication system and that the system control assigns the necessary system resources to support the full duplex dispatch call (instructing user station to operate in full duplex mode, page 2 [0018]). It should be noted that directing means showing the way by conducting or leading or imposing direction on. Edward thus discloses the communication server directing at least one of the user stations to operate in full duplex mode as Edward discloses that one or more other users who are participating in the call are placed in the full duplex mode of operation by the communication system (through system control 308, page 1 [0013] and figure 3) and that the system controller provides the necessary channel resources to support a full duplex call (page 1 [0012]) and that a visual alert is sent to each radio indicating to the user that the originator of the dispatch call wants to go in full duplex operation ("directing" other users to operate in a full duplex mode, page 1 [0014]).

Edwards fails to specifically disclose the limitation of during the real-time media session, the communication server detecting that a half-duplex capable station joins the session. Edward however discloses that users of mobile stations may operate in a full duplex mode or half duplex mode (page 1 [0014]) and that users may terminate the communication if a device leaves the coverage area of the communication system (page 2 [0016]). Sun further discloses the concept of having a user wishing to join an existing teleconference selects the join button (col7 lines 54-58) and that the teleconference are operable in full duplex or half duplex modes (col7 lines 15-20). It would have thus been obvious to a person skilled in the art at the time the invention was made to incorporate the concept of having the capability of joining an existing conference as disclosed by Sun into the method for providing full duplex and half duplex dispatch calls, in order to efficiently ensure that users of mobile devices are capable of joining conference calls that are held in half duplex or full duplex modes.

The combination of Edwards and Sun further fails to disclose the specific limitation of responsively directing each other participating station to operate in the half-duplex mode, when a half duplex station joins the session. Edward however discloses that in a session, if one of the radios involved is not capable of being placed in full duplex mode, it may continue in the dispatch call in a half duplex mode (page 1 [0013]) and that the other radios operating in full duplex mode must wait for the radios operating

in half duplex mode (page 2 [0014]), providing an efficient means of managing duplex radios. However the concept of directing all the radios of a system to a half-duplex mode, due to individual radio capabilities is a simple and well known concept known in the art. Mahale discloses of such a concept as Mahale discloses of auto-negotiation in which makes it possible for data communication devices to exchange information about their abilities over a link segment and allows a data communication device to select the best transmission speed and transmission mode based on capabilities of the device at opposite of the link (col1 lines 15-39). Mahale further discloses that if both ends of the link support full duplex mode, Device A select this mode. However, if device C connected to device A supports only half duplex mode, device A automatically detects these capabilities of device C and selects half duplex mode (responsively directing each other participating station to operate in the half duplex mode, when a half duplex station joins the session, col1 lines 39-46), which is accomplished through a hub that senses the capabilities (col1 lines 26-30). Thus it would have been obvious to a person skilled in the art at the time of the invention to incorporate the concept of stepping down the capabilities of all the radios in a conference due to one radio with lower capabilities (directing all the radios of a system to a half-duplex mode which is a lower capability) as disclosed by Mahale into the method for providing full duplex and half duplex dispatch calls as disclosed by the combination of Edwards and Sun, in order to provide conference service to all radio, no matter it's capability.

Regarding claim 2, Edward discloses the method of claim 1, further comprising:

the communication server selecting the mode (the system controller in response to receiving the full duplex dispatch call request will provide the necessary channel resources to support a full duplex call (page 1 [0012])).

Regarding claim 3, Edwards discloses the method of claim 2, wherein selecting the mode comprises:

the communication server learning that at least one of the user stations is half-duplex capable and responsively selecting half-duplex as the mode (users who are participating in a call are placed in the full duplex mode or half duplex mode, page 1 [0013])).

Regarding claim 5, Edwards discloses the method of claim 1, wherein instructing the at least one user station to operate in the mode comprises:

sending an instruction to the at least one user station, the instruction directing the at least one user station to operate in the mode (distinct audio/visual alert indicating the mode, page 1 [0014])).

Regarding claim 6, Edward discloses the method of claim 5, wherein sending the instruction comprises sending the instruction within session setup signaling (page 2 [0016])).

Regarding claim 7, Edward discloses the method of claim 5, further comprising:

a given one of the user stations receiving the instruction and responsively operating in the mode during the real-time media session (page 1 [0014]).

Regarding claim 14, Edwards discloses the method of claim 1, further comprising:

during initiation of the real-time media session, the communication server receiving from a user station a request to operate in the mode (system controller in response to receiving the full duplex dispatch call request (page 1 [0012]); and

the server responsively performing the directing (provide the necessary resources to support the full duplex call (page 1 [0012])).

2. Claim 8, 9, 10, 11, 13, is rejected under 35 U.S.C. 103(a) as being unpatentable over Edwards (US 2004/0228292), in view of Sun et al. (US 6501740), in view of Mahale et al. (US 6141350), in view of Palaez et al. (2004/0190489), hereinafter referred to as Edwards, Sun, Mahale, and Palaez.

Regarding claim 8, 11, 13, the combination of Edwards, Sun, and Mahale fails to specifically disclose wherein operating in the mode during the real-time media session comprises:

receiving an incoming media stream from the communication server while sending an outgoing media stream to the communication server during the real-time media session;

treating the incoming media stream as a floor denial if the mode is half-duplex;

playing out the incoming media stream if the mode is full-duplex. Edward however discloses of the well-known concept of push to talk, which involves half-duplex communications (page 1 [0003]). Palaez further discloses PTT (push to talk) services is a half-duplex mode of communication in which communications occur in only one direction and that many communication are bi-directional which is a full duplex communication (page 1 [0005]). Palaez further discloses that in PTT operational mode, to control which party in a call session has transmission rights, correlating to having the floor; the user pushes a PTT button (page 1 [0006]). Thus it would have been obvious to a person skilled in the art at the time the invention was made to incorporate the well known concept of preventing an incoming media stream in a half duplex mode and allowing the incoming media stream if the mode is full duplex as disclosed by Palaez into the method for providing full duplex or half duplex dispatch calls as disclosed by Edwards. It should further be noted that it is well known that in half duplex mode communications, only one direction of communications is allowed to occur and that a floor is used to distinguish the user and the direction of communication.

Regarding claims 9, 10, the combination of the combination of Edwards, Sun, Mahale, and Palaez fails to specifically disclose the limitation of presenting a floor denial alert to a user in response to receipt of the incoming media stream. Edwards however discloses of using audio/visual alerts indicating to the users of what mode to operate in (page 1[0014]). Thus it would have been obvious to a person skilled in the art at the time the invention was made to use a floor denial alert in response to receipt of the

incoming media stream in order to effectively alert users of a communication device the capable operations in full/half duplex modes.

Response to Arguments

3. Applicant's arguments with respect to claim 1-3, 5-14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

2. Light et al. (US 20040208180), System And Method For Supporting Auto-Negotiation Among Standards Having Different Rates.

3. Crayford (US 5610903), Auto Negotiation System For A Communication Network.

4. Mellone et al. (US 20040198425), Establishing Half-Duplex Audio Link As Battery Saving Means.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NGUYEN NGO whose telephone number is (571)272-8398. The examiner can normally be reached on Monday-Friday 7am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Firmin Backer can be reached on (571)272-6703. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner, Art Unit 2616

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